

## Summary of 2014 Update to Surface Water Engineering Standards

<b>2013 Surface Water Engineering Standards</b>	<b>2014 Surface Water Engineering Standards</b>	<b>Revision</b>
Cover Sheet	Cover Sheet	Change 2013 to 2014, correction to web address
D1-02	D1-02	Added a definition for “Flooding”.
D2-07.1 11	D2-07.1 11	Corrected the datum from “NSRS 2007” to “NSRS 2011”
D2-07.1 12	D2-07.1 12	Corrected the datum from “NSRS 2007” to “NSRS 2011”
D2-07.1 22	D2-07.1 22	Revised AutoCAD Version from “2004 through 2008” to “2004 through 2011” and added “ROM” after CD.
D2-08.1	D2-08.1	Corrected the datum from “NSRS 2007” to “NSRS 2011”
D2-08.2	D2-08.2	Under Ponds, Bioswales, and Bioretention Facilities added “Plant details including the type of plant”. Clarify that engineers must submit a compliance letter on a form provided by the Utility department for private constructed drainage systems.
D2-08.2	D2-08.2	Reformatted text by removing bullets and indenting text.
D2-09	D2-09	Clarified the operation and maintenance requirements between MR 1 to 5 sites with the MR 1 through 9 sites by adding new sections D2-09.1 and D2-09.2
Figure 2.4	Figure 2.4	Changed the title of the figure from “Sample Stormwater Facility Maintenance Activity Log” to “Sample Stormwater Facility Maintenance Activity Log For NPDES Permit” and require the log to be submitted to the utility annually.
D4-06.7C	D4-06.7C	Clarified that the wet season water table measurements are to be made with a piezometer. Clarified under what conditions the geotechnical report shall address the potential impact of an infiltration facility on downslope areas.

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D4-06.7D	D4-06.7D	Modified the methods for determining the design infiltration rates to the PIT test and soil grain size analysis methods. Clarified the location of the simplified infiltration test.
New section added to 2014 standards	D4-06.7H	Added a new section entitled” Determining subgrade infiltration rates”
New section added to 2014 standards	D4-06.7I	Added a new section entitled” Large Scale Pilot Infiltration Test (PIT)”
New section added to 2014 standards	D4-06.7J	Added a new section entitled “Small-Scale Pilot Infiltration Test”
New section added to 2014 standards	D4-06.7K	Added a new section entitled “Soil Grain Size Analysis Method”
D6-01	D6-01	Revised second sentence of second paragraph to read, “New BMPs that DOE has approved for General Use (GULD) under DOE’s emerging technology program, per Chapter 12, Volume V of the DOE Manual, are allowed”.
Table 6.2B	Table 6.2B	Added “bioretention cell” to the description column under the bioretention row.
D6-02-2C	D6-02.2C	Changed “Rain Garden” to Bioretention Cells”
D6-03.1E	D6-03.1E	Changed “Rain Garden” to Bioretention Cells”
D6-03.2A	D6-03.2A	Changed “Rain Garden” to Bioretention Cells”
D6-03.2A	D6-03.2A	Changes the maximum drawdown time from 72 hours to 48 hours.
D6-03.2A	D6-03.2A	Corrected typo d15 to D15 and d85 to D85
Table 6.6	Table 6.6	Changed “Rain Garden” to Bioretention Cells”. Corrected the section reference in the table.
Table 6.7	Table 6.7	Corrected the section reference in the table.
Table 6.13	Table 6.13	Added “Bioretention Cells” to the sizing factors table.
Table 6.16	Table 6.16	Fixed the broken internet link given as a supplement to the table.

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D6-04.1D	D6-04.1D	Added two approved products for overflows for bioretention Neenah R-4351-B & R-4351-D
Table 7.2	Table 7.2	Corrected typo in the footnote to the table.
D8-07	D8-07	Corrected section reference in DOE manual.
Appendix D-1 NDP-2	Appendix D-1 NDP-2	Renamed detail “Bioretention Cell”.
Appendix D-1 NDP-3	Appendix D-1 NDPP-3	Revise detail A to show only two rows of slots not four.
Appendix D-1 NDP-6	Appendix D-1 NDP-6	Renamed detail “Bioretention Overflow with Conveyance Furrow” and changed “Rain Garden” to “Bioretention”.
Appendix D-1 NDP-7	Appendix NDP-7	Renamed detail “Bioretention Overflow with Pipe Culvert” and changed “Rain Garden” to “Bioretention”.
Appendix D-1 NDP-8	Appendix D-1 NDP-8	Revised note 3 and added “ASTM D3034” to a callout note.
Appendix D-1 NDP-9	Appendix D-1 NDP-9	Renamed detail “Observation Port for Bioretention”
Appendix D-4	Appendix D-4	Added two new approved materials for overflows for bioretention Neenah R-4351-B, R-4351-D